DIPHTHERIA

I. IDENTIFICATION

- A. CLINICAL DESCRIPTION: An upper respiratory tractillness characterized by sore throat, low-grade fever, and an adherent membrane of the tonsils, pharynx, and/or nose.
- B. REPORTING CRITERIA: Clinical diagnosis.

C. LABORATORY CRITERIA FOR CONFIRMATION:

- Isolation of *Corynebacterium diphtheriae* from clinical specimen.
- Histopathologic diagnosis of diphtheria.
- D. KENTUCKY CASE DEFINITION: A clinically compatible illness that is either laboratory confirmed or epidemiology linked to a laboratory-confirmed case.

II. ACTIONS REQUIRED/PREVENTION MEASURES

A. KENTUCKY DISEASE SURVEILLANCE REQUIRES URGENT NOTIFICATION: REPORT TO THE LOCAL OR STATE HEALTH DEPARTMENT **IMMEDIATELY** upon recognition of a case or suspected case in a time period not greater than 24 hours. If health department personnel cannot be contacted directly, notification shall be made by electronic submission or by telephone to the emergency number of the Division of Epidemiology and Health Planning, **1-888-973-7678**.

B. EPIDEMIOLOGY REPORTS REQUIRED:

1. Kentucky Reportable Disease Form - EPID 200 (Rev. Jan/03).

C. PREVENTION MEASURES:

- Diphtheria toxoid is routinely administered with tetanus toxoid and acellular pertussis vaccine at 2, 4, 6, 12-18 months of age and school entry (4-6 years of age). Maintain active protection among adults by administering a booster dose of Td every 10 years.
- Ensure that those at higher risk of patient exposure, such as health care workers, are Fully immunized and receive a booster dose of Td every 10 years.

D. PUBLICHEALTHINTERVENTIONS:

- Isolate case until two cultures taken not less than 24 hours apart and not less than 24 hours after cessation of antimicrobial therapy are negative. If cultures cannot be obtained, isolation may end after 14 days of appropriate treatment.
- Culture all close contacts and keep under surveillance for seven days.
- Identify contacts that handle food or milk or have contacts with unimmunized children. Exclude these contacts from high-risk occupations until negative cultures

are obtained.

- Treat all contacts (a single dose of penicillin IM or a 7-10 day course of erythromycin PO) regardless of their immunization status.
- Give a booster dose of a preparation containing diphtheria toxoid to previously immunized contacts and a primary series to unimmunized contacts.

III. CONTACTS FOR CONSULTATION

- A. DEPARTMENT FOR PUBLIC HEALTH, COMMUNICABLE DISEASE BRANCH: 502-564-3261.
- B. DEPARTMENT FOR PUBLIC HEALTH, SURVEILLANCE AND HEALTH DATA BRANCH: 502-564-3418.
- C. DEPARTMENT FOR PUBLIC HEALTH, DIVISION OF LABORATORY SERVICES: 502-564-4446.

IV. RELATED REFERENCES

- 1. Chin, James, ed. DIPHTHERIA. In: Control of Communicable Diseases Manual. 17th ed. Washington, DC: American Public Health Association, 2000: 165-170.
- 2. Pickering LK, ed. Diphtheria. In: 2000 Red Book: Report of the Committee on Infectious Diseases. 25th ed. Elk Grove Village, IL: American Academy of Pediatrics, 2000: 230-234.